

AMENDMENTSIn the Claims

Please amend claims 1, 3, 4, 11, and 13-15 pursuant to 37 C.F.R. § 1.121(c)(1)(i) as set forth in the “clean” version set forth below. Entry is respectfully requested. A version with markings to show the changes made pursuant to 37 C.F.R. § 1.121(c)(1)(ii) is attached hereto as Appendix A.

A1 1. (Amended) A cellular system using a code division multiple access (CDMA) scheme, comprising:  
N (N is a positive integer) pilot channels for transmitting reference signals whose transmission signals are known in advance; and  
M (M is a positive integer) data channels for transmitting information;  
wherein each of said M data channels is made to dynamically correspond to one or a plurality of said N pilot channels.

A2 3. (Amended) A system according to claim 1, wherein said pilot channel is used for coherent detection of at least said data channel to which said pilot channel corresponds.

4. (Amended) A system according to claim 1, wherein said pilot channel is used for transmission power control on at least said data channel to which said pilot channel corresponds.

A3 11. (Amended) A cellular system using a code division multiple access (CDMA) scheme, comprising:  
transmission means having N (N is a positive integer) pilot channels;  
transmission/reception means having M (M is a positive integer) data channels;

antenna means having L (L is a positive integer) types of directivity patterns;  
and

notification means for dynamically notifying a correspondence between said data channels and said pilot channels,

B3 wherein information to be transmitted/received by using each of said M data channels is transmitted/received by selecting an optimal pattern from the L types of directivity patterns in accordance with a position of a mobile terminal used for communication,

a reference signal to be transmitted by using each of said N pilot channels is transmitted by selecting one pilot channel for each directivity pattern used for said data channel, and

said notification means notifies a pilot channel used for transmission with the same directivity pattern as that for said data channel.

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A4 13. (Amended) A reference signal transmission method in a cellular system using a code division multiple access (CDMA) scheme of transmitting reference signals by using N (N is a positive integer) pilot channels, transmitting/receiving information by using M (M is a positive integer) data channels, performing transmission/reception by using said data channels through antenna means having L (L is a positive integer) types of directivity patterns, and dynamically notifying a correspondence between said data channels and said pilot channels through notification means, comprising the steps of:

transmitting/receiving information to be transmitted/received by using each of said M data channels by selecting an optimal pattern from the L types of directivity patterns in accordance with a position of a mobile terminal used for communication;

transmitting a reference signal to be transmitted by using each of said N pilot channels by selecting one of said pilot channels for each directivity pattern which is being used on said data channel; and

causing said notification means to notify a pilot channel which is being used for transmission with the same directivity pattern as that for said data channel.

14. (Amended) A base station apparatus in a cellular system using a code division multiple access (CDMA), comprising:

N (N is a positive integer) pilot channels for transmitting reference signals whose transmission signals are known in advance; and

M (M is a positive integer) data channels for transmitting information, wherein each of said M data channels is made to dynamically correspond to one or a plurality of said N pilot channels.

15. (Amended) A base station apparatus in a cellular system using a code division multiple access (CDMA) scheme, comprising:

transmission means having N (N is a positive integer) pilot channels;

transmission/reception means having M (M is a positive integer) data channels;

antenna means having L (L is a positive integer) types of directivity patterns; and

notification means for dynamically notifying a correspondence between said data channels and said pilot channels,

wherein information to be transmitted/received by using each of said M data channels is transmitted/received by selecting an optimal pattern from the L types of directivity patterns in accordance with a position of a mobile terminal used for communication,

a reference signal to be transmitted by using each of said N pilot channels is transmitted by selecting one pilot channel for each directivity pattern used for said data channel, and

said notification means notifies a pilot channel used for transmission with the same directivity pattern as that for said data channel.

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